

**[0059]** A system, apparatus and method for performing low coherence ranging of a sample with high transverse resolution and large depth of focus can be provided. For example, an optical ranging system including a light source can be used. Certain exemplary arrangement can be provided, e.g., a first arrangement for directing light from the light source to the sample, a second arrangement for directing reflected light from the sample to a detector, at least one detector, and a third arrangement for processing light data received by the detector and which generates an image can be utilized. Further, for example, an optical element can be provided which can have a transverse resolution defined as  $\Delta r$  is less than or equal to about  $\mu 5m$ , and a depth of focus  $\Delta z$  of at least about 50  $\mu m$ .